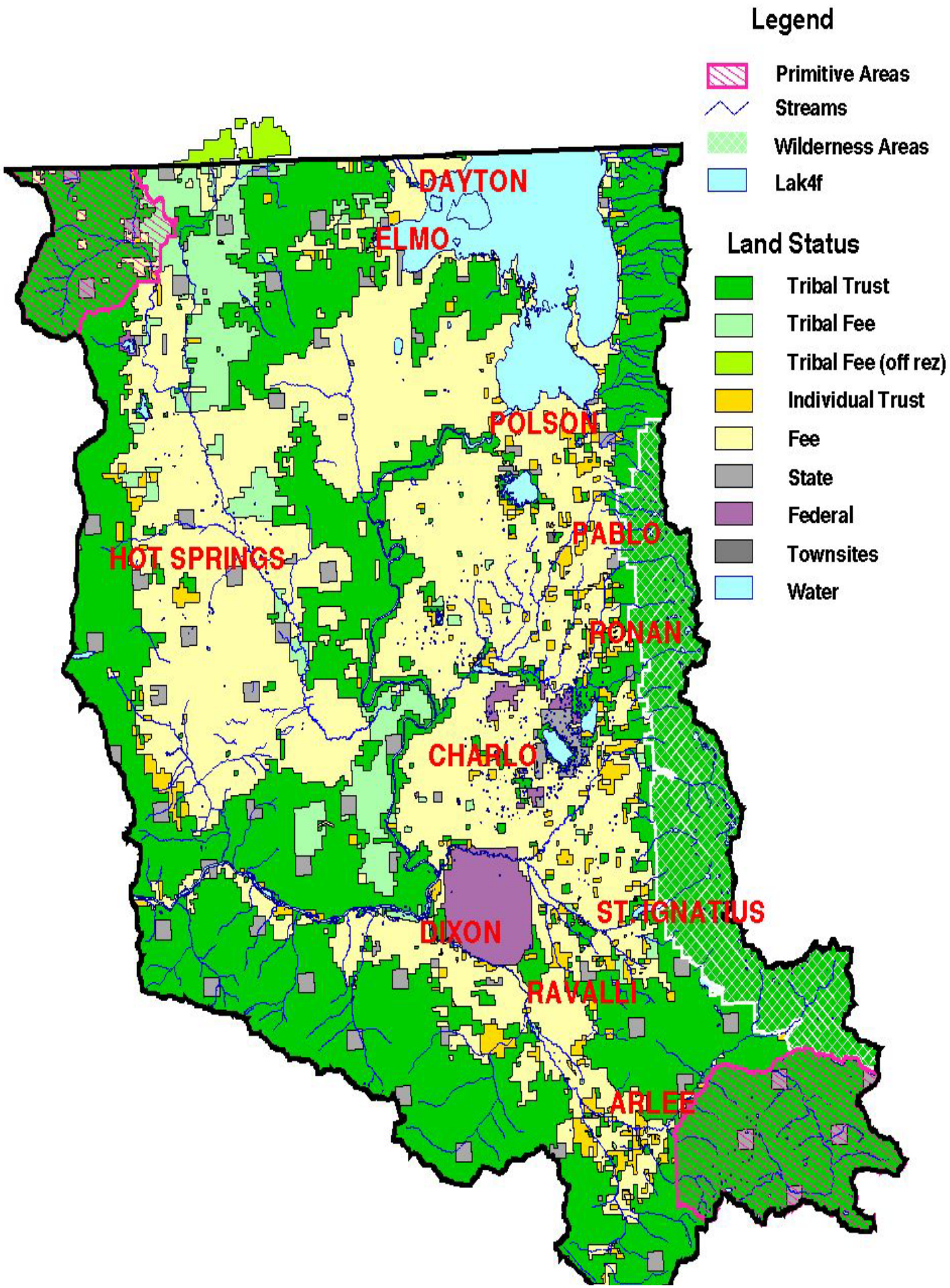
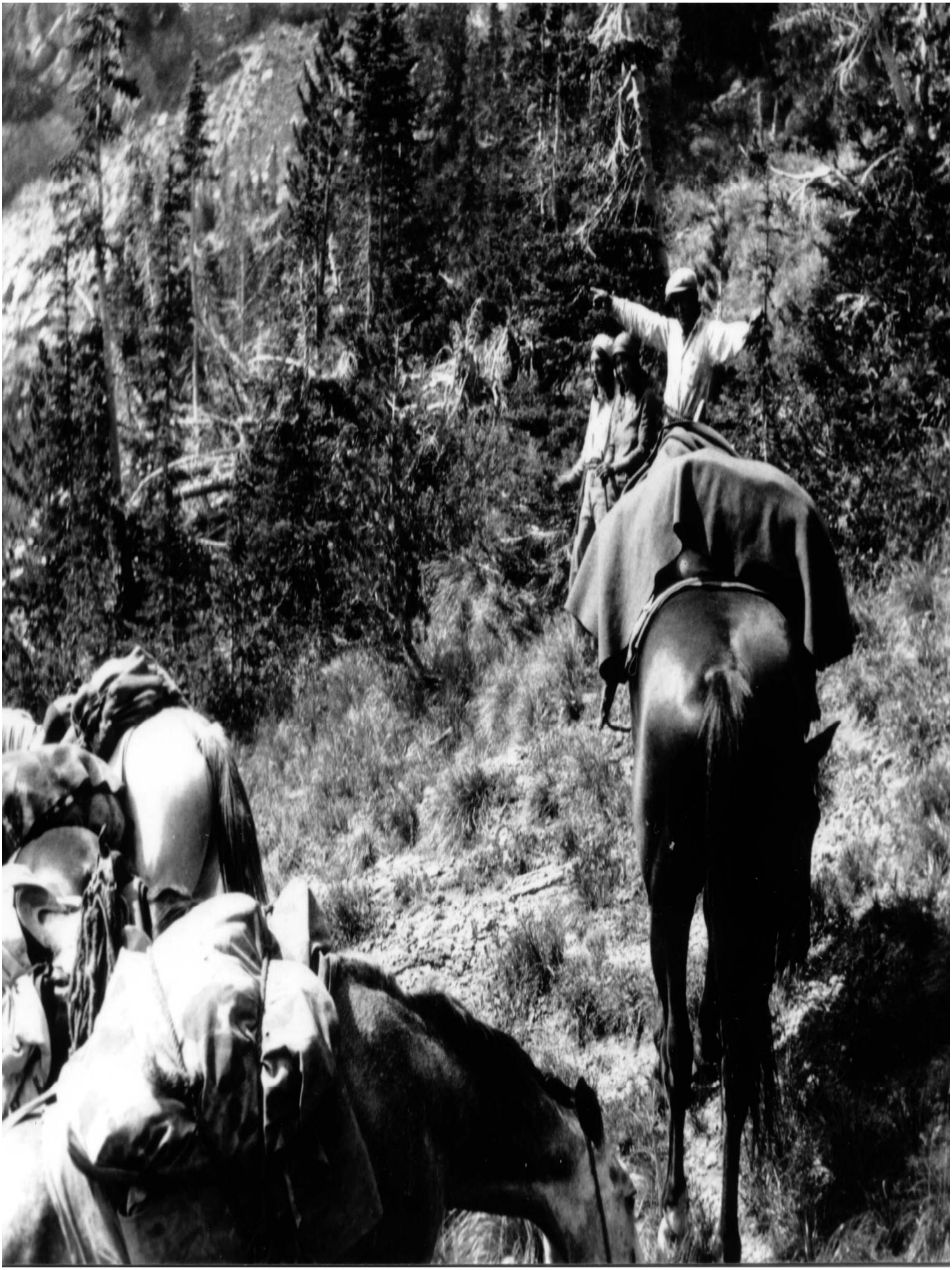
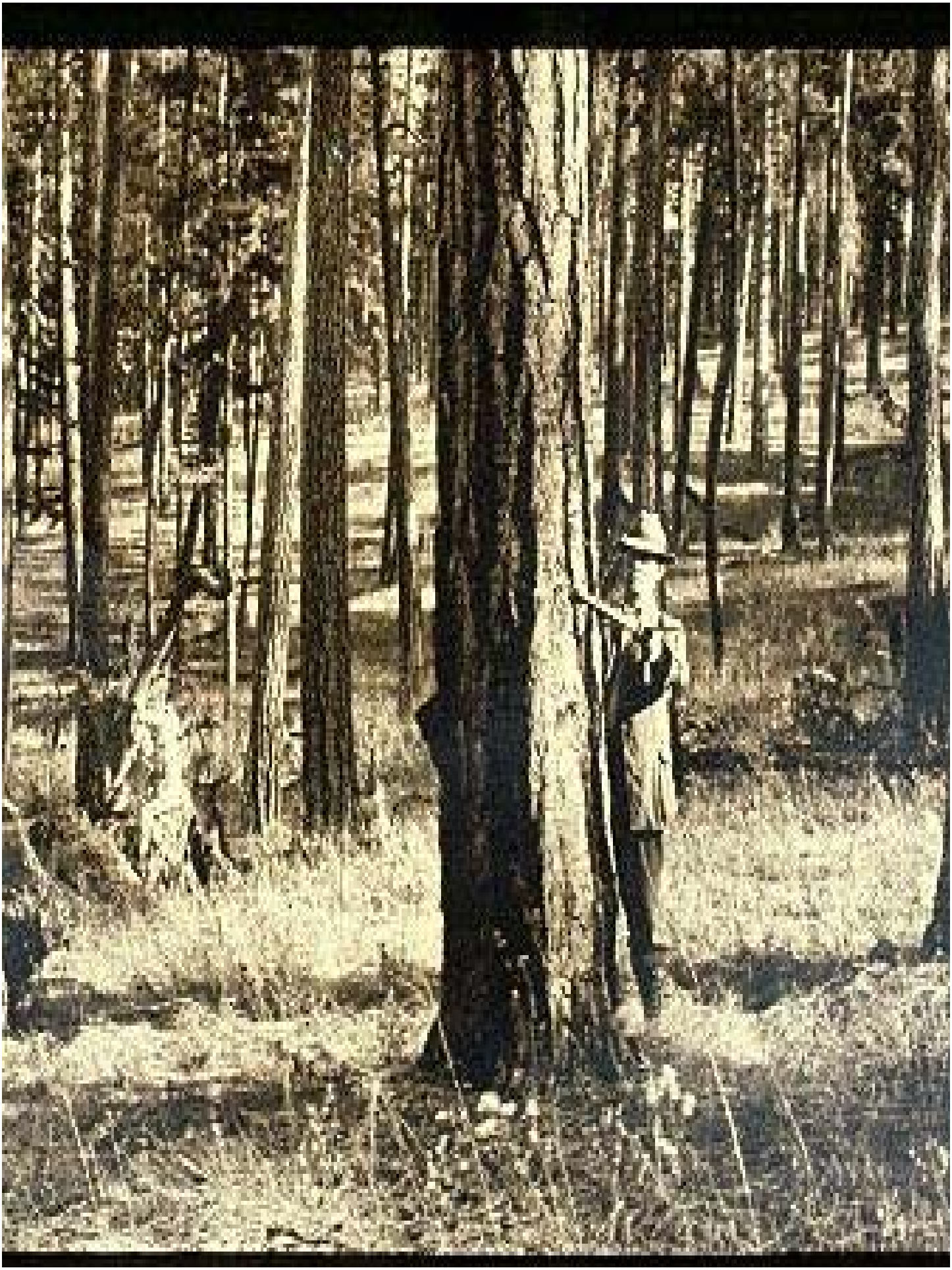
RESTORATION ON THE FLATHEAD INDIAN RESERVATION


Legend
Primitive Areas
Streams
Wilderness Areas
Lak4f
Land Status
Tribal Trust
Tribal Fee
Tribal Fee (off rez)
Individual Trust
Fee
State
Federal
Townsites
Water
DAYTON
ELMO
POLSON
PABLO
HOT SPRINGS
RONAN
CHARLO
ST. IGNATIUS
DIXON
RAVALLI
ARLEE



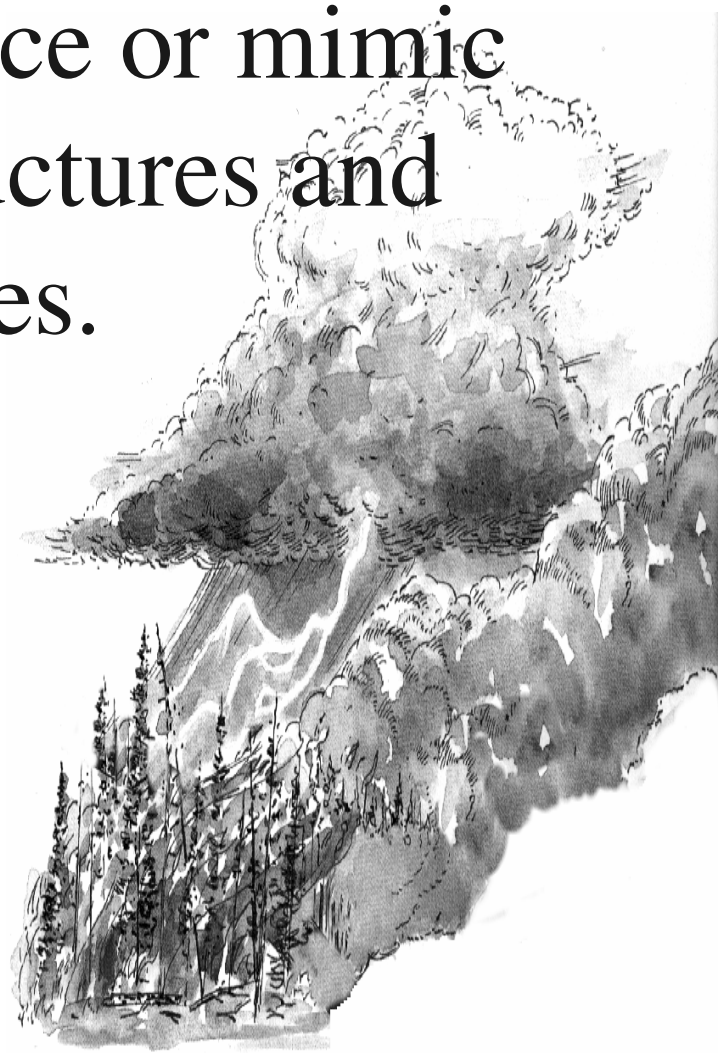


Our basic Premise:

To manage for diverse and sustainable forests, we must maintain and restore the processes, structures, and functions under which our forests evolved.

Based on this premise

We tried to develop management strategies that would reproduce or mimic key structures and processes.



Overview of the Plan

The primary goal of the plan is to balance the restoration of pre-European forest conditions with the needs of sensitive species and human uses.

- Silvicultural treatments will reverse the effects of fire exclusion and past undesirable forest practices.
- Prescribed fire is a major tool.
- Harvesting will mimic natural disturbances where possible.
- The plan will restore some grasslands, woodlands, and riparian zones; reduce livestock impacts; reduce road densities; protect some roadless areas from roading; and designate some new wilderness.

Scale and Timing

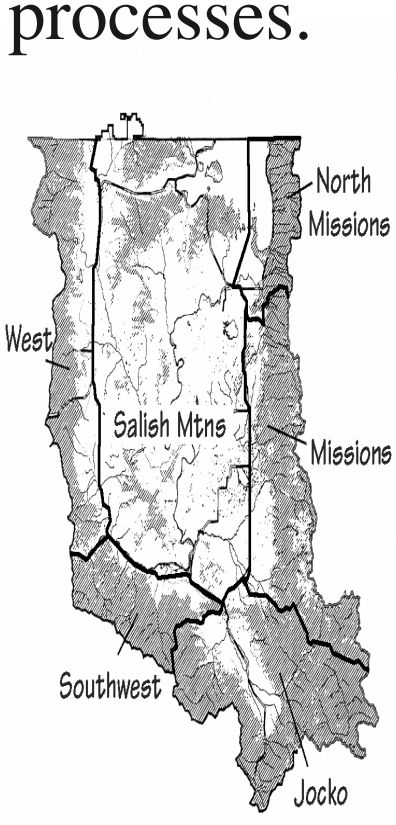
Timber removal is intended to mimic natural disturbances, and therefore it should occur at a frequency and on a scale comparable to that of natural disturbances.

- Frequent, minor disturbances in the Nonlethal Fire Regime (uneven-aged silvicultural systems)
- Larger and infrequent disturbances in the Mixed and Lethal Fire Regimes (even-aged systems)

A Landscape Scale

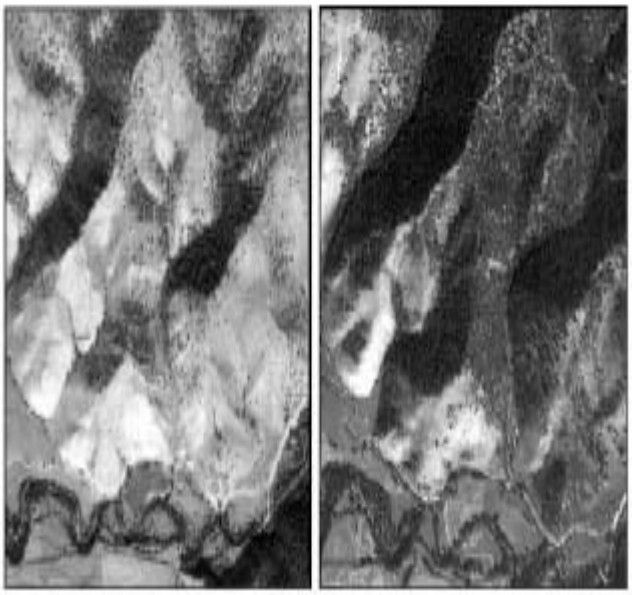
- We tried to view the entire forest as the context for management rather than the individual parts.

- So the plan is designed to provide conditions within and across *landscapes* that mimic natural processes.

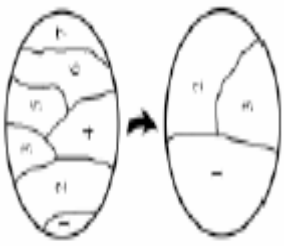


The need for a management change: Forest Trends

1. Encroachment: forest expansion onto grasslands



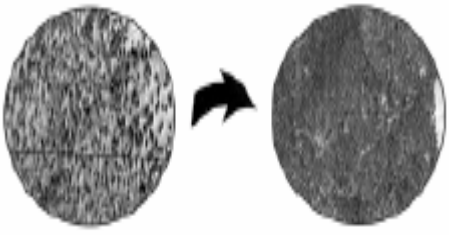
2. Loss of diversity



Forest Trends

3 & 4.
Shifts in spp. composition and stand structure.

5.
Increase in density



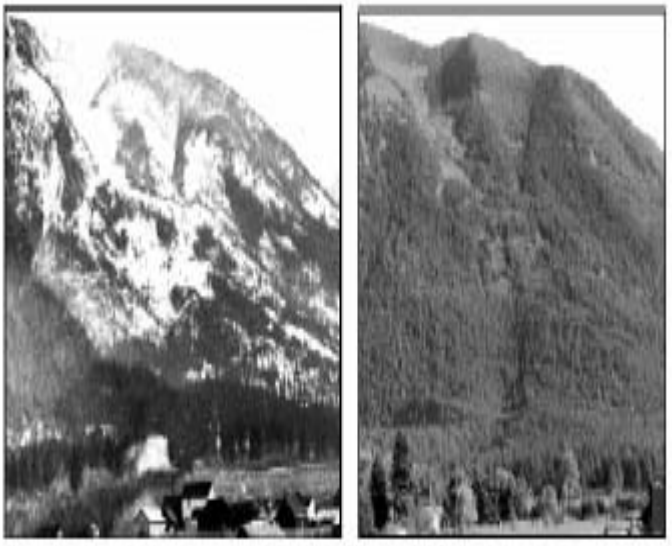
Forest Trends

6.
Changes in patch size and edge.

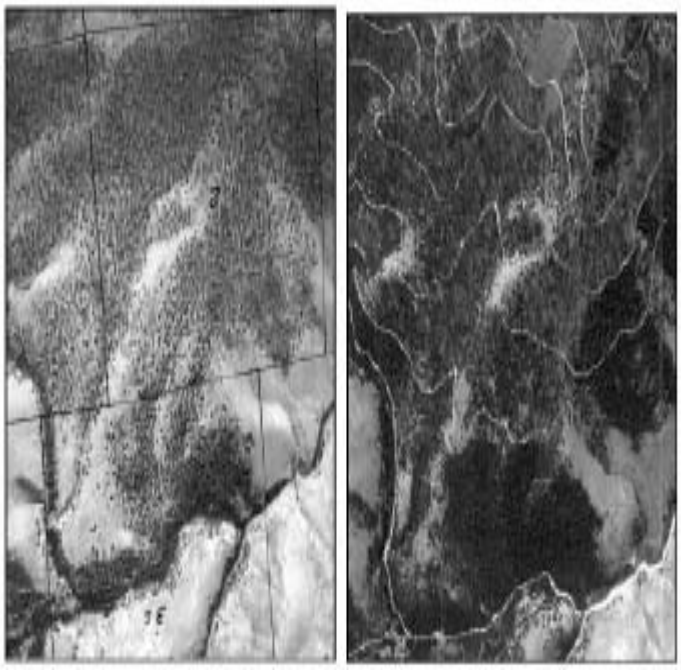
7.
Shifts in ages and sizes of trees (at low elevations).

Forest Trends

8. Shifts in ages and sizes of trees (at high elevations)



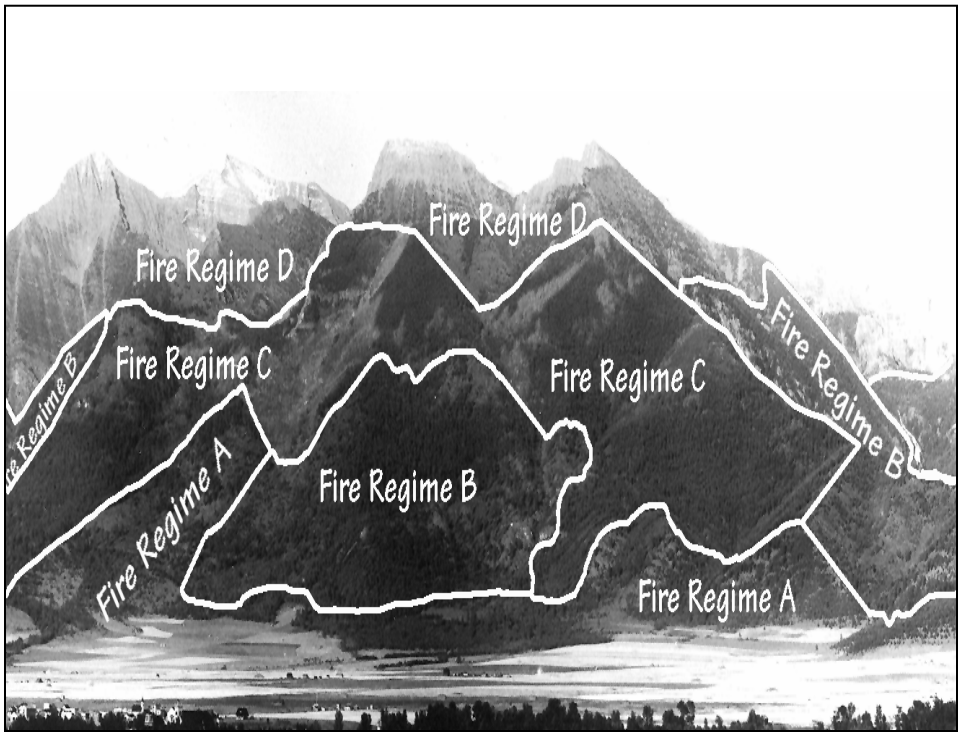
9. Increases in roads and human development



Some Ecosystem Management Terms

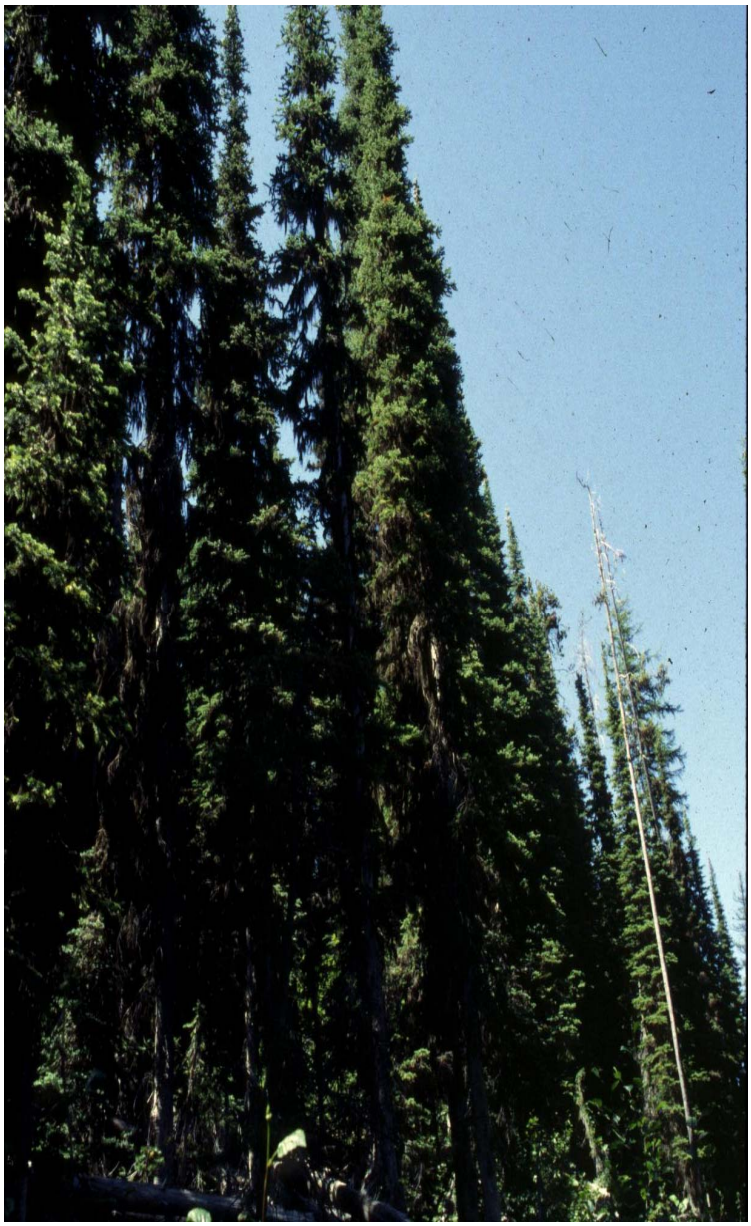
- **Fire Regimes**

We identified four major fire regimes: ***nonlethal, mixed, lethal, and timberline.***



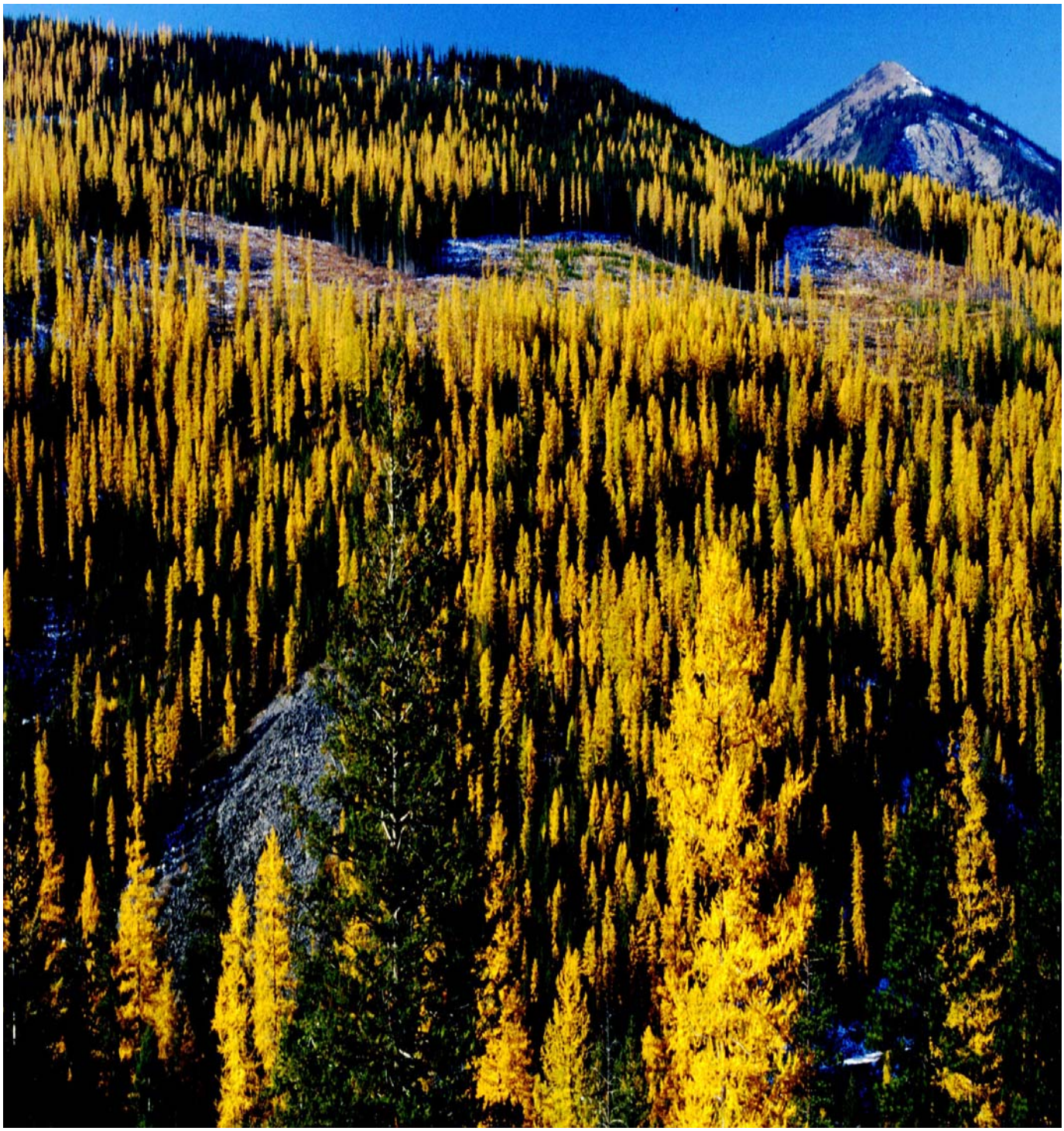
LETHAL FIRE REGIME

- LONG FIRE RETURN INTERVAL OF 75-300+ YEARS
- FOUND ON MAINLY HIGH ELEVATIONS, NORTH ASPECTS
- ABOUT 300,000 ACRES
- WILDLAND FIRE USE OPTIONS



MIXED FIRE REGIME

- HISTORIC FIRE RETURN INTERVAL 5 – 50 YEARS
- FOUND AT LOWER TO MID ELEVATIONS, ON ALL ASPECTS
- ABOUT 200,000 ACRES
- FIRE EXCLUSION HAS HAD ADVERSE EFFECTS (LOSS OF DIVERSITY)

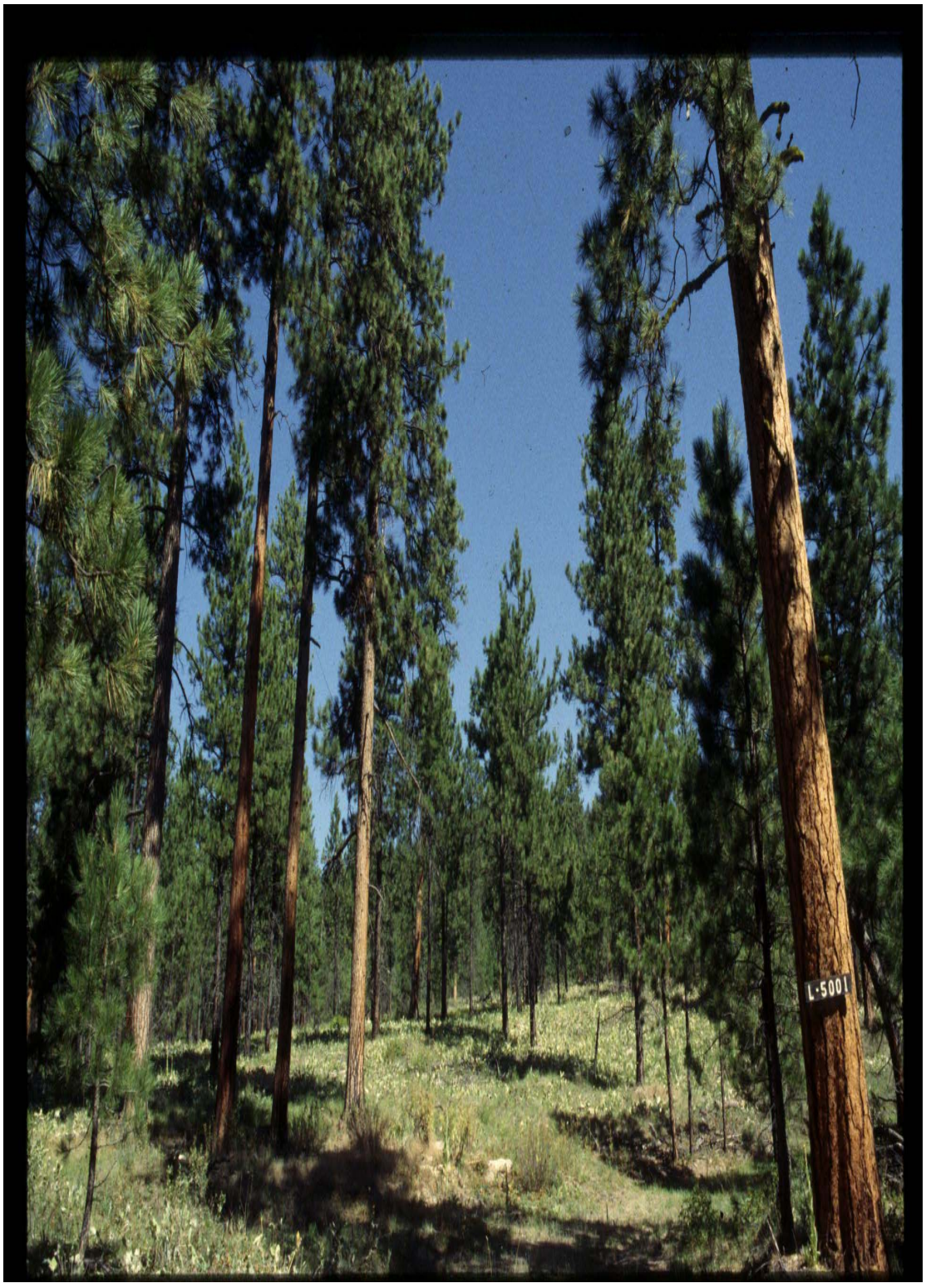


NON-LETHAL FIRE REGIME

- HISTORIC FIRE RETURN INTERVAL 3 – 15 YEARS
- FOUND ON LOWER ELEVATION, EAST TO WEST ASPECTS
- ABOUT 120,000 ACRES
- FIRE EXCLUSION HAS HAD ADVERSE EFFECTS

FOREST HEALTH

WILDLIFE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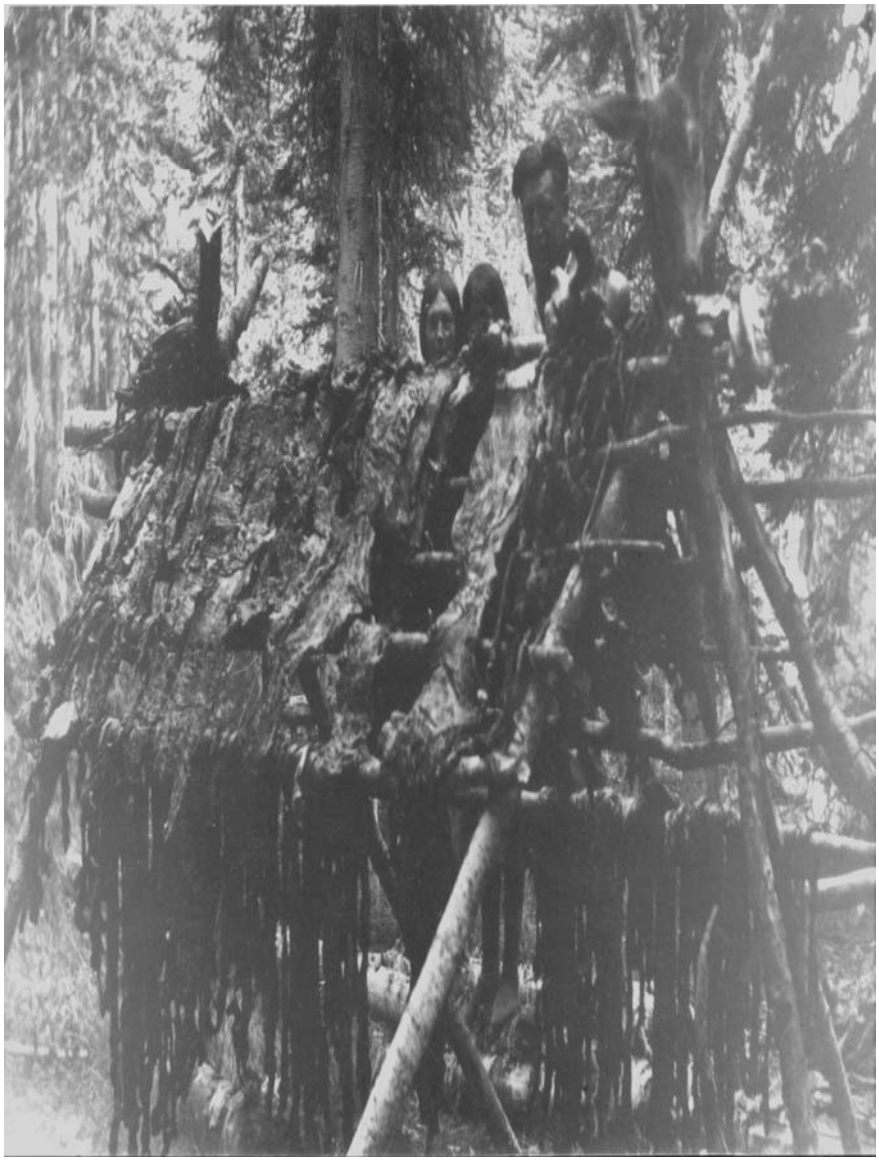
CULTURAL



ADAPTIVE MANAGEMENT

- Planning
- Action
- Monitor
- Evaluate

Our process involved four basic steps:

1. Modeling the forest structures that existed prior to European settlement,
2. Analyzing the conditions that exist today,
3. Analyzing the changes, determining the kinds of conditions that are sustainable and desirable, and
4. Developing a strategy to achieve those conditions.